

Types of Stretching

- a) Ballistic – stretch through movement ROM (dynamic)
- b) Static- a stretch without moving the joint angle
- c) PNF ~~Proprioceptive Neuromuscular Facilitation~~

Contract Relax

Combinations of alternating contract and relaxation (stretches)

ie push heel into the ground, stretch hamstring after

- ♦ goal is to adjust the stretch reflex (ROM)

Muscle Spindles respond to length and will initiate a *contraction* to maintain a desired length. By holding the stretch you are overcoming the Muscle Spindle Control allowing the muscle to lengthen permanently (15 sec)

Golgi Tendon Organs found in tendons respond to tension (length and force) when stimulated will *cause a muscle to relax*. They are the 2nd phase of protection.

Will allow a first degree sprain/ strain or tear but will help to avoid a 3rd degree injury (complete rupture)

Strain- is a stretch tear or rip of the muscle or adjacent tissue

Sprain- mainly involves ligamentous and capsular tissue of a joint

Heat, Ice Warm-up all increase effectiveness of stretching to increase ROM(range of motion)

- note only warm-up has an effect on decreasing injury

Typically 30 sec stretch is sufficient for most people, however, you may require increased time or repetition for some people

Sep 26-2:20 PM

Sep 26-2:22 PM